

ABSTRACT OF THE DISCLOSURE

An automatic programming apparatus 1 comprises: storing sections 11, 12, 13, and 14 for storing shape data of a product having a recess and a protrusion formed in the bottom surface inside the recess, workpiece data, tool data, and machining condition data; a concave portion machining tool storing section 15 for storing the identification data of a plurality of tools selected in advance as tools to be used for the machining of said recess; a CL data generating section 16 for referring to the identification data, thereby setting a plurality of tool combinations, and then generating CL data of the recess for each combination; a machining time calculating section 18 for calculating the machining time for each combination on the basis of the CL data; and an NC program generating section 20 for generating an NC program by using the CL data having the minimum machining time.